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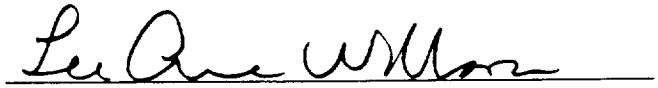
Report on the ADP Project NASA 5-1187

A Study of Main Sequence A Star Infrared Colors Using IRAS Archival Data

Principal Investigator
L. A. Willson
Astronomy Program
Physics Department
Iowa State University
Ames IA 50011
(515) 294 6765



Co-Investigators
B. M. Patten, Iowa State University/University of Hawaii
E. W. Brugel, University of Colorado

Final Report

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For this project, we first developed a database of IRAS observations, vsini measurements, and visual spectral types / optical colors to use to test the hypothesis that pulsation and rotation contribute to mass loss along the main sequence. If the hypothesis of main sequence mass loss linked to rotation and pulsation is correct, then these infrared excesses should correlate with rotational velocities.

The results of this research are summarized in the attached paper, which appeared in the *Astronomical Journal* in July, 1991.

During the course of the project we gave a contributed paper that also appeared in a conference proceeding:

"Pulsation, Mass Loss and Stellar Evolution," Trieste Workshop on Pulsation and Mass Loss, September 1987.